REVISED SYLLLABUS OF MBA (TECHNOLOGY MANAGEMENT) DAY AND EVENING AS PER CBCS AND AICTE GUIDELINES

FACULTY OF MANAGEMENT
DEPARTMENT OF BUSINESS MANAGEMENT
OSMANIA UNIVERSITY
HYDERABAD – 500007

University with potential for Excellence
(Accredited by NAAC A+ Grade)

MBA (TM) COURSE ACADEMIC REGULATIONS, STRUCTURE AND SYLLABUS AS PER CBCS AND AICTE GUIDELINES WITH EFFECT FROM 2022 - 2023

REVISED SYLLLABUS OF MBA (TECHNOLOGY MANAGEMENT) DAY AND EVENING AS PER CBCS AND AICTE GUIDELINES

RULES AND REGULATIONS OF M.B.A. PROGRAM-2022

The Master of Business Administration (M.B.A.) is a Post-Graduate course offered as:

    I.   Two-year i.e., four semester Full Time Day Program

    II. Two – year i.e., four semester Full Time Evening Program

1. Eligibility Conditions
M.B.A. (Technology Management) - Day

Candidate seeking admission into Full Time M.B.A. (Day) program must be:

1. Bachelor degree holder of Osmania University or a degree recognized by the university as equivalent thereto and /(or) as per the rules laid down by the University;
2. The candidate seeking admission must qualify in the Entrance Examination, conducted by the appropriate authority in the year of admission as per the norms prescribed by the University.
3. The admission of Non-resident Indians and candidates admitted in lieu of them will be as per the University Rules in force on the date of the admission.
4. Foreign candidates' admission is based on the Screening Process of the University currently in vogue.

M.B.A. (Technology Management) - Evening

Candidate seeking admission into Part Time M.B.A. (Evening) program must be:

1. Bachelor degree holder of Osmania University or a degree recognized by the university as equivalent thereto and /(or) as per the rules laid down by the University;
2. The candidate seeking admission must qualify in the Entrance Examination, conducted by the appropriate authority in the year of admission as per the norms prescribed by the University.

   a. Must have at least Two years experience in Executive / Managerial /Administrative/ Supervisory position in any organization after obtaining the Bachelor Degree.

<div align="center">Or</div>

   b. Officers / Executives / Engineers working with any Government / Quasi govt. /Autonomous bodies / Local authorities/ teachers working in academic institutions with post-bachelor's experience of 2 years.

<div align="center">Or</div>

   c. Officers of the Defence Forces / Establishments holding Administrative/ Executive post with not less than 2 years experience after obtaining Bachelor degree.

3. The candidate should submit Service certificate and No Objection Certificate from the present employer.

Note: The Work experience of Two years should be completed as on the Date of Admission into MBA program.

REVISED SYLLLABUS OF MBA (TECHNOLOGY MANAGEMENT) DAY AND EVENING AS PER CBCS AND AICTE GUIDELINES

2. Instruction Schedule:

Instruction will be provided as per the workload indicated in the structure, Rules and regulations of M.B.A. Program for all Theory, Practical and Project Work course requirements. The almanac will be as follows for all semesters.

Duration of Instruction : 14 Weeks

Preparation Holidays : 7-10 Days

Total No of Hours (Theory + Tutorial + Practicals)

Per Semester : **420 Hours**

Rules of Attendance

Students must attend 75% of the total classes conducted for all the courses put together in a semester. Relaxation of 10% of attendance might be given to a student on medical grounds on the basis of a valid medical certificate and payment of condonation fee prescribed by the university.

3. Promotion Rules

A student will be promoted subject to the following rules:

a. I Semester to II Semester:

A student should put in a minimum of 75% of attendance in aggregate in all the courses put together of the Term (65% in the case of medical exemption) and should be registered for the University exam for the I semester.

b. II Semester to III Semester

A student should put in a minimum of 75% of attendance in aggregate in all the courses put together of the Term (65% in the case of medical exemption) and should have passed at least 50% of Theory courses of I & II Semesters put together. (Viva Voce and Lab courses not considered for this purpose).

c. III Semester to IV Semester:

A student should put in a minimum of 75% of attendance in aggregate in all the courses put together of the Term (65% in the case of medical exemption) and having registered for the University Examination.

d. IV Semester to V Semester: (Applicable for Evening Programme only)

A student should put in a minimum of 75% of attendance in aggregate in all the courses put together of the Term (65% in the cases of medical exemption) and should have passed at least 50% of Theory courses of I, II, III & IV Semesters put together. (Viva Voce and Lab courses not considered for the purpose)

e. V Semester to VI Semester: (Applicable for Evening Programme only)

A student should put in a minimum of 75% of attendance in aggregate in all the courses put together of the term (65% in the cases of medical exemption) and having registered for the University Examination.

REVISED SYLLLABUS OF MBA (TECHNOLOGY MANAGEMENT) DAY AND EVENING AS PER CBCS AND AICTE GUIDELINES

4. Cancellation of Admission:

The admission of a candidate admitted to the MBA Course stands cancelled if:

He / She does not put in at least 40% of attendance in Semester-I.

<div align="center">Or</div>

He / She puts in at least 40% of attendance in Semester – I, but failed to register for 1st Semester Examinations

<div align="center">Or</div>

He /She fails to fulfill all the requirements for the award of the degree as specified, within 4 academic years from the time of admission in case of full time 2 year MBA program.

CHAIRMAN
BOS IN BUSINESS MANAGEMENT
OSMANIA UNIVERSITY,
Hyderabad-500 007, T.S., India.

REVISED SYLLLABUS OF MBA (TECHNOLOGY MANAGEMENT) DAY AND EVENING AS PER CBCS AND AICTE GUIDELINES

5. Project Work:

The students should undertake the Project internship during the summer vacation (For 6 weeks of duration) intervening between II & III Semesters of MBA Day Program. Project Report Work should be carried out in the Final Year of MBA Program i.e., III & IV Semesters for Day Program.

The students are required to do project work in any area of Management under the active guidance of Internal Faculty Member assigned to the student.

The Project work usually consists of selecting a Topic / Problem / Theme in any area of management, gather relevant data, analyze and interpret the same in a systematic and scientific manner.

The Project Work should be undertaken under the supervision of the Faculty Member assigned for the purpose. The Project Report should be submitted to the University 30 days (one month) before commencement of Final Semester Examinations.

6. Scheme of Evaluation:

Internal Assessment: 30 Internal Marks are divisible into 2 parts.

➤ 20 Marks that consist of 5 short questions each carrying 2 marks and 2 long questions each carrying 5 marks.

➤ 10 marks for Theory Assignments

Semester End Examination for 70 Marks divisible as Part 'A' and 'B'.
➤ Part A – 20 Marks (5 Questions each carrying 4 marks) without choice.
➤ Part B – 50 Marks (5 Questions each carries 10 Marks) with internal choice.

7. Award of Grades For Project Report and Viva Voce Examinations :

IV Semester Project:

Project Assessment for 150 Marks

Marks distributed for Project Assessment shall be as follows:

Internal Assessment

Research Design Seminar (III Semester)	1 Credit	25 Marks
Progress Seminar (III Semester)	1 Credit	25 Marks

IV Semester end Assessment

Dissertation	1 Credit	25 Marks
Final Presentation	2 Credits	50 Marks
Viva Voce during Final Presentation	1 Credit	25 Marks

8. Instructional Work Load For Theory, Practical Courses and 'Mentoring & Project Work':

Each of the Theory Courses of the MBA Program shall have instructional workload of 4 periods of 60 Minutes duration per week in addition to mentoring and project work as specified in the course curriculum. The Instructional workload for each of the Practical and Lab Courses shall be 1 Period of 60 Minutes duration respectively per week. Tutorial for each subject shall be for one hour per week. All subjects must have one period of Tutorial each per week.

9. Tutorial:

Individual and Group assignments, Case Studies,Ppresentations, Quizzes, Book Reviews, Article Reviews, Management Games etc.

10. Evaluation System:

a. All courses of MBA Program will carry a Maximum of 100 Marks each.
b. Duration of the university examination for all the courses is three hours each.
c. All the courses will have 70% marks for university semester end examination and 30% marks for internal examination (CIE).
d. The Guidelines, Rules and Regulations framed by the University in this regard will be applicable to the MBA (Day) Program.

11. Conduct of Examinations:

Examination will be conducted based on the existing rules of examination Branch that are applicable to other PG Courses

12. Award of Degree and Division:

Candidates will be awarded MBA Degree on successful completion of all Theory Courses, Practical Courses, Viva Voce and Project Report. The Division / Class will be awarded as per the University norms.

13. Readmission for Pursuing Additional Elective Courses:

A student can be given readmission for pursuing additional electives after completion of MBA program subject to payment of requisite fee prescribed by the college / Department. Such candidates have to satisfy all the rules including attendance rule in vogue on par with regular students.

a. The additional elective must be pursued in the same college in which the student studied and completed the MBA Program.
b. The admission must be done within four weeks of the commencement of the III Semester.

CHAIRMAN
BOS IN BUSINESS MANAGEMENT
OSMANIA UNIVERSITY,
Hyderabad-500 007, T.S., India.

REVISED SYLLLABUS OF MBA (TECHNOLOGY MANAGEMENT) DAY AND EVENING AS PER CBCS AND AICTE GUIDELINES

14. Total number of credits to be completed to be eligible for the award of MBA degree:

Total number of credits at the end of fourth semester (MBA-Day) = 26 + 26+24+26 = 102

15. Awarding Cumulative Grade Point Average (CGPA) and Semester Grade Point Average (SGPA):

15.1 Subjectwise Grading

Grades shall be awarded to indicate the performance of students in each of subjects studied. Based on the percentage of marks obtained in both Continuous Internal Evaluation and End Semester Evaluation, a corresponding letter grade shall be given as shown in Table 1.

15. 2. Semester Grading

The Semester Grade Point Average (SGPA) is calculated by dividing the sum of credit points (ΣCP) secured from all subjects/courses registered in a Semester, by the total number of credits registered during that Semester. SGPA is rounded to two decimal places and is computed as

SGPA = For each Semester, ΣCP/Total no. of credits

As a measure of the performance of a student, a 10point absolute grading system using the following letter grades (as per UGC/AICTE guidelines) and corresponding percentage of marks shall be followed:

Table 1

S. No	% of Marks in a Subject	Grade	Letter Grade	Grade Points
1	85 to 100	Outstanding	O	8.5-10
2	70 to 84	Excellent	A	7-8.49
2	60 to 69	Very Good	B	6-6.99
3	55 to 59	Good	C	5.5-5.99
4	50 to 54	Above Average	D	5-5.49
5	40 to 49	Average	E	4-4.99
6	<40	Fail (Repappear)	F	
9	Absent	Absent	Ab	0

A student who has obtained an 'F' grade in any subject shall be deemed to have 'failed' and is required to reappear as a 'supplementary student' in the End Semester Evaluation, as and when offered. In such cases, internal marks in those subjects shall remain the same as those obtained earlier.

To a student who has not appeared for an examination in any subject, 'Ab' grade shall be allocated in that subject, and he/she is deemed to have 'failed'. A student shall be required to reappear as a 'supplementary student' in the End Semester Examination, as and when a student earns grade point (GP) in each subject/course, on the basis of the letter grade secured in that subject/course. The corresponding 'credit points' (CP) are computed by multiplying the grade point with credits for that particular subject/course as shown below.

REVISED SYLLLABUS OF MBA (TECHNOLOGY MANAGEMENT) DAY AND EVENING AS PER CBCS AND AICTE GUIDELINES

Credit points (CP) = grade point (GP) x credits

For a subject/course a student passes the subject/course only when $GP \geq 4$ ('D' grade or above)

15. 3 Cumulative Grade Point Average (CGPA)

The Cumulative Grade Point Average (CGPA) is a measure of the overall cumulative performance of a student in all semesters considered for registration. The CGPA is the ratio of the total credit points secured by a student in all registered courses in all semesters, and the total number of credits registered in all the semesters. CGPA is rounded off to two decimal places. CGPA is thus computed from the I year II semester onwards at the end of each semester.

Computation of SGPA and CGPA are done using the procedure listed above. For Final % of Marks equivalent to the computed final CGPA, as :

$$\% \text{ of Marks} = (\text{final CGPA} - 0.5) \times 10.$$

As a measure of the performance of a student, a 10-point absolute grading system using the following letter grades (as per UGC/AICTE guidelines) and corresponding percentage of marks shall be followed.

16. General Clause:

It may be noted that beside the above specified rules and regulations all the other rules and regulations in force and applicable to semester system in Post-Graduate courses in Osmania University will be applicable as amended from time to time by the University. The students shall abide by all such Rules and Regulations. This includes Plagiarism rules notified by the University.

CHAIRMAN
BOS IN BUSINESS MANAGEMENT
OSMANIA UNIVERSITY,
Hyderabad-500 007, T.S., India.

MBA (TECHNOLOGY MANAGEMENT) DAY AND EVENING REVISED SYLLABUS 2022-23

I YEAR
SEMESTER–I

Course Code	Course Title	Nature	Credits	HPW (Th+Tu+P)	Max Marks (CIE+SEE)
MTM101	Technology Management, Creativity & Innovation	Core	4	4Th + 1 Tu	30+70
MTM102	Management & Organization Behaviour	Core	4	4Th + 1 Tu	30+70
MTM103	Accounting for Management	Core	4	4Th + 1 Tu	30+70
MTM104	Marketing Management	Core	4	4Th + 1 Tu	30+70
MTM105	Statistics for Management	Core	4	4Th + 1 Tu	30+70
MTM106	Economics for Managers	Core	4	4Th + 1 Tu	30+70
MTM107	Advanced Excel	Core	2	4P	15+35P
Total credits at the end of I Semester			**26**		**650**

HPW – Hours Per Week
CIE – Continuous Internal Exam
SEE – Semester End Exam
Th- Theory
Tu – Tutorial
P – Practical

CHAIRMAN
BOS IN BUSINESS MANAGEMENT
OSMANIA UNIVERSITY,
Hyderabad-500 007, T.S., India.

MBA (TECHNOLOGY MANAGEMENT) DAY AND EVENING REVISED SYLLABUS 2022-23

I YEAR
SEMESTER–II

Course Code	Course Title	Nature	Credits	HPW (Th+Tu+P)	Max Marks (CIE+SEE)
MTM201	Technology Forecasting & Transfer Management	Core	4	4Th + 1 Tu	30+70
MTM202	Human Resource Management	Core	4	4Th + 1 Tu	30+70
MTM203	Business Intelligence	Core	4	3Th + 2P	30+50+20
MTM204	Business Research Methods	Core	4	4Th + 1 Tu	30+70
MTM205	Financial Management	Core	4	4Th + 1 Tu	30+70
MTM206	Operations Research	Core	4	4Th + 1 Tu	30+70
MTM207	Seminar Presentation *	Core	2		Grade
Semester Credits			**26**		**600**
Total Credits at the end of II Semester			**52**		**1250**

HPW – Hours Per Week
CIE – Continuous Internal Exam
SEE – Semester End Exam
Th- Theory
Tu – Tutorial
P - Practical

* **Seminar should be evaluated for 50 marks and then converted to Grade.**
* **Student Seminars will be done by students on Semester I and II subjects**

MBA (TECHNOLOGY MANAGEMENT) DAY AND EVENING REVISED SYLLABUS 2022-23

I - SEMESTER

MBA (TECHNOLOGY MANAGEMENT) DAY AND EVENING REVISED SYLLABUS 2022-23

Paper Code: MTM 101

Course: TECHNOLOGY MANAGEMENT, CREATIVITY AND INNOVATION

Course Objectives:

1. The course aims at providing an overview of various issues connected with Management of Technology in organizations.

2. The course provides an exposure to technology related issues like technology identification, technology forecasting, technology acquisition and technology absorption.

3. The course aims at providing an exposure to creativity as a source of technological innovation.

4. The course provides an understanding of invention as a process and its logical linkages with thinking process, creativity and creation of new technologies.

Learning Outcomes:

1. At the end of studying this course, the student will be able to understand the foundations of Technology management.

2. To understand the models of innovation.

3. To learn about the theories and process of creativity.

UNIT – I: Introduction

Definitions, Role and importance, Technology developments, implications of Technology Management, Technology change, TLC, Diffusion and Growth of Technologies- Technological Transformation alternatives, Technology Policy and Planning, Technology development-Options & Strategies, Socio-Economic planning, production functions & Technological Change, Macro effects of Technology change.

UNIT – II: Technology Development and Acquisition

Forecasting and Technology Innovation chain, Role of Technology Forecasting approaches and methodologies; Technology Strategy, Generation, and Development. Technology Transfer - Models, Modes, Technology search strategy, Dimensions of Technology Transfer, Features & Routes of Technology Transfer, Technology absorption capabilities, Pricing of Technology Transfer agreements, Code of conduct for Technology transfer, Government initiative, Technology transfer and absorption process at unit level.

UNIT – III: Technology absorption and diffusion

Technology - package and Technology dependence, concepts, constraints of Technology absorption, Technology import in India, Government initiatives, Benefits of Technology absorption. Technology Assessment (TA) Organization and Management of Technology Assessment, Technology Evaluation. Diffusion - Major diffusion activities, Diffusion Strategy

MBA (TECHNOLOGY MANAGEMENT) DAY AND EVENING REVISED SYLLABUS 2022-23

UNIT – IV: Creativity

The Process of ideation, creativity and the evolution of artificial forms. The nature of Technological Knowledge, Technologist as a creative being, Identification of Problem and analysis. Coping with blocks to creative problem solving, Theories of Creativity, Identification of problem. Morphological analysis and related techniques, Brainstorming and its variants, Lateral thinking, Synectics and related approaches. Evaluation of ideas; Implementation of Ideas, Computer assisted creativity.

UNIT – V: Technology Innovation

Evolutionary thinking - Evolutionary Models for Technological change, Models in Technological evolution, Selectionism and Complexity, Models of innovation - Sources and Transfer of innovation, Theory of Tech-innovation; Technology cycles, innovation streams, Managing through cycles of technological change. Planned innovation, planned innovation systems, Market driven innovation.

Suggested Readings:

1. Sharif Nawaz: Management of Technology Transfer & Development, APCFT, Bangalore.
2. Rohtagi P K, Rohtagi K and Bowonder B: Technological Forecasting, Tata McGraw Hill, New Delhi.
3. Betz Fredrick: Managing Technology, Prentice Hall, New Jersey.
4. Gaynor: Handbook of Technology Management, McGraw Hill.
5. Tarek Khalil: Management of Technology, McGraw Hill International.
6. Dasgupta. S: Technology and Creativity & Creativity, Oxford University Press, New York.
7. Proctor. T: The Essence of Management Creativity, Prentice - Hall, New Delhi.
8. Richards. T: Creativity and Problem Solving Network, Gower, Hampshire.
9. Ceserani. J & Greatwood. P: Innovation & Creativity, Kogan Page, London.
10. Ziman. J: Technological Innovation as an Evolutionary Process, Cambridge University Press, Cambridge.
11. Garud. R, Nayyar. P.R & Shapira. Z.B: Technological Innovation: Oversights and Insights, Cambridge University Press.
12. Afufah. A: Innovation Management: Strategies, Implementation, and Profits, Oxford University Press, New York.
13. Katz: Human side of Managing Technological Innovation, Oxford University Press, New York.
14. Bacon. F. Jr & Butler: Achieving Planned Innovation, the Free Press, New York.

V. Sudha
CHAIRMAN
BOS IN BUSINESS MANAGEMENT
OSMANIA UNIVERSITY,
Hyderabad-500 007, T.S., India.

MBA (TECHNOLOGY MANAGEMENT) DAY AND EVENING REVISED SYLLABUS 2022-23

Paper Code: MTM 102

Course: MANAGEMENT AND ORGANIZATIONAL BEHAVIOUR

Course Objectives:

1. This course is designed to introduce the concepts and theories of management
2. To analyze human perceptions and behavior at work place.
3. The course aims at offering insights into contemporary situations in organizational settings.

Learning Outcomes:

1. By the end of the course, the students would have a comprehensive understanding of management principles
2. The student is exposed to the organizational functions in various organizational settings
3. The Learner may gain insights into individual, inter-personal and group actions in organizations.

Unit-I: Management Philosophy and Approaches:

Management Principles, Process, Functions and Typology, 3D Model of Managerial Approach, Management thought-Classical, Human Relations, Systems and Contingency Approaches, Hawthorne's Experiments, Contributions of Henry Fayol, F. W. Taylor and Peter Drucker.

Unit-II: Organizational Design, Structure and Decision Making:

Basic and advanced Models of Organizational Designs, Main Approaches to Organization Structure - Decision making under Bounded Rationality, Certainty, Uncertainty, Risk, Conflict. Open and Closed Decision making models, QWL. Quality Circle. Emerging Organizational Architectures.

Unit-III: Organizational Behavior:

Personality Traits, Big 5 personality traits, MBTI, the Process of Perception and Attribution, Kelly's personal construct Theory, Cognitive Dissonance, Classical, Operant and Reinforcement Conditioning, Transactional Analysis, Johari Window, Attitudinal Genesis in Mentoring, Motivation - Content and Process Theories.

Unit -IV: Group Dynamics and Leadership:

Group Dynamics & Team Building, Kurt Lewin contribution, Conflict Resolution models,. Worklife balance. Trait and Behavioral Approaches to Leadership, Managerial Grid, Path - Goal Theory, Vroom's Decision Tree Approach to Leadership, Hersey and Blanchard Model.

Unit-V: Emerging aspects of OB:

Organization culture and Organization climate. Stress Management and Counseling, Management of change and Organization development. Communication Process. Organizational Citizenship Behaviour. Organizational Behaviour Modification. Behavioural Entropy in Learning Organization, Behavioural Metrics in Effective Organization.

MBA (TECHNOLOGY MANAGEMENT) DAY AND EVENING REVISED SYLLABUS 2022-23

Suggested Readings:

1. Harold Koontz and Heinz Weihrich, Essentials of Management, TMH.
2. Prasad LM, Principles and Practice of Management, Sultan Chand & Sons, New Delhi.
3. Stephen P. Robbins, "Organizational Behaviour", Prentice Hall.
4. Fred Luthans, "Organizational Behaviour", McGraw Hill InternationalEdition.
5. Udai Pareek, Understanding Organisational Behaviour, Oxford University Press
6. P.C. Tripathi, P.N. Reddy, Principles of Management, Tata McGraw-Hill Publishing Company Limited, New Delhi.
7. Robbins & Judge, Organisational Behaviour, Prentice Hall of India.
8. Lauriel J Mullins, Management and Organisational Behaviour, Pearson
9. Ashwathappa, Organisational Behaviour, HPH, Hyderabad
10. L M Prasad, Management Principles and Practices, S. Chand Publications, NewDelhi.

CHAIRMAN
BOS IN BUSINESS MANAGEMENT
OSMANIA UNIVERSITY,
Hyderabad-500 007, T.S., India.

MBA (TECHNOLOGY MANAGEMENT) DAY AND EVENING REVISED SYLLABUS 2022-23

PAPER CODE – MTM 103
Course: ACCOUNTING FOR MANAGEMENT

Course Objectives:

To gain knowledge of the process, principles and conventions of accounting
1. To develop the skill of preparation of final accounts
2. To understand the methods of analysis of financial statements
3. To gain knowledge of breakeven analysis and its use to management

Learning Outcomes:

At the end of semester, the student will be able to understand and present the following:
1. Learner may gain knowledge about Journal, Ledger, Trial Balance and Final Accounts
2. Analyze performance of companies using Ratio Analysis
3. Analyze Cash Flow position of companies and can make CVP Analysis.

Unit - I: Introduction to Financial Accounting
Meaning, Definition and Scope of Financial Accounting; Accounting concepts and conventions, their implications on accounting system –Double Entry Accounting System – Accounting Process – Types of Accounts – Primary and Secondary Record – Preparation of Journal, Ledger Posting Balancing and Preparation of Trial Balance (Including Numerical Problems) - Accounting Equation – Static and Dynamic view - Accounting standards – their rationale and growing importance in global accounting environment, International Financial Reporting Standards (IFRS).

Unit – II: Preparation of Final Statements
Distinction between capital and revenue expenditure; Depreciation concept and methods. Preparation and presentation of financial statements – Trading, Profit and loss account,Balance Sheet with adjustments for closing stock, outstanding expenses, accrued income,prepaid expenses, advance income, depreciation, loss/profit on sale, bad debts and provision for bad debts (Including Numerical Problems); provisions of the Indian Companies Actregarding preparation and presentation of financial statements; external auditor's report, the report of the Board of Directors, and voluntary disclosures

Unit – III: Financial Statement Analysis
Financial Statement analysis – Ratio analysis – Rationale and utility of ratio analysis – classification of ratios -calculation and interpretation of ratios-liquidity ratios, activity/turn over ratios, Profitability ratios, leverage and structural ratios (Including Numerical Problems)- Advantages and disadvantages; common size statement analysis.

CHAIRMAN
BOS IN BUSINESS MANAGEMENT
OSMANIA UNIVERSITY,
Hyderabad-500 007, T.S., India.

Unit – IV: Cash Flow Statement

Cash Flow Statement – Advantages and Utility of Cash flow statement – Preparation of Cash flow statement (Including Numerical problems) - Tax planning – Tax Avoidance – Tax evasion; Cost concepts – Classification of Costs- – preparation of cost sheet (no numericals)

Unit – V: CVP Analysis

CVP analysis – Break-even Point, concept of contribution and P/V Ratio, Margin of Safety (Including Numerical problems) - Managerial uses of Break-even concept – product mix, make or buy decision, capacity utilization, plant shut down decision, Standard Costing – Variance Analysis – Material Variances – Labour Variances (Simple Problems Related to Material and Labour Variances Only)

Suggested Readings:

1. Shashi K. Gupta & R.K Sharma, Management Accounting Principals
2. Ramchandran, Ramkumar Kakani, Financial Accounting for Management, Tata Mc Graw Hill Publishing, Pvt,Ltd.
3. Shah Paresh, Basic Financial Accounting for Business Managers, OxfordUniversity, Press
4. Bhattacharyya Asish K, Financial Accounting for Business Managers, PHI
5. Ambarish Gupta, Financial Accounting for Management - An AnalyticalPerspective, Pearson education
6. Earl K. Stice and James .D. Stice, Financial Accounting – Reporting and Analysis,South Western, Cengage Learning.
7. Jawaharlal and Seema Srivastava, "Financial Accounting: Principles and Practice,", S.Chand
8. S.P. Jain and K. L. Narang, "Cost Accounting, Principles and Methods", Kalyani Publishers, Ludhiana
9. Maheshwari, Basic Accounting, S. Chand Publication, New Delhi.

CHAIRMAN
BOS IN BUSINESS MANAGEMENT
OSMANIA UNIVERSITY,
Hyderabad-500 007, T.S., India.

MBA (TECHNOLOGY MANAGEMENT) DAY AND EVENING REVISED SYLLABUS 2022-23

PAPER CODE – MTM104

Course: MARKETING MANAGEMENT

Course Objectives:

To impart the basic tools of marketing and selling
1. To analyze factors affecting business environment and Buyer buying behavior.
2. To analyze markets and competitive structures
3. To assess the value of culture in marketing decisions and make students be aware of global changes.

Learning Outcomes:
1. Students can be equipped with marketing and selling skills of modern environment.
2. Buyer behaviour and perceptions are key for a business success that can be thoroughly learnt.
3. Channel Dynamics involved in marketing can be assessed and better control techniques for optimum utilization of resources be learned.

Unit – I: Origin of Marketing:
Origin of Marketing, Barter systems, Markets, Marketing Management, Tasks, Company orientations towards market place, Marketing Mix – expanded, Marketing Mix, Marketing Program and Marketing Strategy, Managing marketing effort, Designing Global marketing, Marketing Environment – Company's Micro and Macro Environment – Interface with other functional areas.

Unit – II: Market Segmentation:
Segmentation process, Levels and Bases for Segmentation, Segmenting Consumer Markets, Business Markets, International Markets, Market Targeting – Evaluation of Market Segments, Selecting Market Segments, VALS Segmentation System – Differentiation Strategies, Product Positioning, Positioning Strategies, Building customer Value, Demand Measurement and Sales Forecasting Methods, Estimating Current and Future Demand, Competitive Strategies.

Unit – III: Designing Marketing Program:
Decisions involved in Product, Branding, Packaging, Product Line and Product Mix Decisions, New Product Development, Product Life Cycle, Pricing, Strategies, Distribution Channels, Channel Management Decisions, Network Marketing, Promotion Mix – Advertising, Social Media and Advertising, Sales Promotion, Public Relations, Personal Selling, Online Marketing.

Unit – IV: Consumer &Industrial Markets:

Classification of Products, Consumer Behaviour, Seven O's Structure, Factors affecting Consumer Behaviour, Model of Buyer Behaviour, Adoption Process, AIDA Model, Industrial Markets – Characteristics, Industrial Buyer Behaviour, Services Markets – Characteristics and Strategies, Emergence of Online Services. Use of I C T in Service Marketing.

Unit – V: Marketing Control & Consumerism:

Types of Marketing Organization Structures and Factors affecting Global marketing Organization, Changing practices of Marketing, Marketing Control, Annual Plan Control, Efficiency Control, Profitability Control and Strategic, Marketing Audit, Consumerism, Consumer rights and Consumer forums.

Suggested Readings:

1. Philip Kotler, "Marketing Management", Pearson Education Prentice Hall of India.
2. Philip Kotler, Kevin Lane Keller, "Marketing Management" PearsonEducation.
3. William J. Stanton, "Fundamentals of Marketing", McGraw Hill Publications.
4. Tapan K Panda, "Marketing Management", Excel Books.
5. Ramaswamy V.S. Namakumari S, "Marketing Management", The Global perspectiveIndian Context Macmillan India Ltd.
6. Rajan Saxena, "Marketing Management", Tata McGraw Hill.
7. Ashwatappa , Principles of Marketing" Himalaya Publishing House, New Delhi
8. Paul Baines, Chris fill, Kelly Page, "Marketing Management", OxfordUniversity Press.
9. Roger J. best, "Market-Based Management", PHI Learning Pvt. Ltd.
10. Kurtz & Boone, "Principles of Marketing", Cengage Publications.

CHAIRMAN
BOS IN BUSINESS MANAGEMENT
OSMANIA UNIVERSITY,
Hyderabad-500 007, T.S., India.

MBA (TECHNOLOGY MANAGEMENT) DAY AND EVENING REVISED SYLLABUS 2022-23

PAPER CODE – MTM 105
Subject: STATISTICS FOR MANAGEMENT

Course Objectives:

1. To introduce descriptive statistics to students for gaining knowledge of Business analysis.
2. Understanding sampling and sampling distributions and hypothesis testing framework with small samples and large samples.
3. Introduce concepts related to Correlation, Regression and their relationship, applicationsof time series data.

Learning Outcomes:
1. Basic Statistics helps the learners in building descriptive analytics.
2. Hypothesis testing is useful in estimation of future market changes and useful in decision making.
3. Correlation, regression techniques are an integral part of planning and controlling business..

Unit – I: Introduction to Statistics
i.) Introduction to Statistics – Overview, origin and development and Managerial Applications of statistics, Measures of Central Tendency, Dispersion, Skewness and Kurtosis.
ii.) Introduction to probability – Concepts and Definitions of Probability – Classical, Relative, frequency, subjective and axiomatic. Addition and Multiplication theorems,Statistical independence, Marginal, Conditional and Joint Probabilities.
iii.) Bayes' theorem and its applications.

Unit – II: Probability Distribution
i.) Probability Distribution-Random Variable (RV), Expectation and Variance of a RV.Probability distribution, function, properties, Continuous and Discrete Probability distribution functions.
ii.) Discrete Probability distributions: Binomial Distribution, Properties and applications;Poisson distribution, properties and applications.
iii.)Continuous Probability Distributions – Normal Distribution, Standard Normal Distribution properties, applications and importance of Normal Distribution.

Unit – III: Sampling
i.) Sampling Theory- The basics of sampling-Sampling procedures-Random and Non- Random methods-Sample size determination-Sampling distribution, Standard Error, Central Limit Theorem.
ii.) Hypothesis Testing-Statistical Estimation, Point and Interval Estimation, Properties of a Good Estimator, confidential interval.
iii.) Large Sample tests-Test for one and two proportions, Test for one and two means, Test for two S.D's.

MBA (TECHNOLOGY MANAGEMENT) DAY AND EVENING REVISED SYLLABUS 2022-23

Unit - IV: Tests of Hypothesis

i.) Small Sample Tests- t- Distribution –properties and applications, testing for one and twomeans, paired t-test.

ii.) Analysis of Variance-One Way and Two ANOVA (with and without Interaction).

iii.)Chi-Square distribution: Test for a specified Population variance, Test for Goodness of fit,Test for Independence of Attributes.

Unit - V: Correlation and Regression

i.) Correlation Analysis-Scatter diagram, Positive and negative correlation, limits for coefficient of correlation, Karl Pearson's coefficient of correlation, Spearman's Rank correlation, concept of multiple and partial Correlation.

ii.) Regression Analysis-Concept, least square fit of a linear regression, two lines of regression, properties of regression coefficients.

iii.) Time Series Analysis-Components, Models of Time Series-Additive, Multiplicative and Mixed models; Trend analysis-Free hand curve, Semi averages, moving averages, Least Square methods.

Suggested Books:

1. Levin R.I., Rubin S. David, "Statistics for Management", Pearson.
2. Gupta S.C, "Fundametals of Statistics", HPH.
3. Keller, G, "Statistics for Management", Cengage Learning.
4. Amir D. Aczel and Jayavel Sounder pandian, "Complete Business Statistics", TMH,
5. John C Lee, "Business and Financial Statistics Using MS-Excel", Cambridge.
6. J.K Sharma, "Business Statistics", Pearson.
7. Arora PN & others, "Complete Statistical methods", S. Chand.
8. Beri, GC, "Business Statistics", TMH.
9. Black Ken, "Business Statistics for Contemporary Decision Making", Wiley.
10. Levine, David M and other, "Statistics for managers using MS. Excel", PHI.

MBA (TECHNOLOGY MANAGEMENT) DAY AND EVENING REVISED SYLLABUS 2022-23

PAPER CODE – MTM106

Course: ECONOMICS FOR MANAGERS

Course Objectives:

1. To make students familiarize with Economic behaviour of a person for market analysis.
2. To understand the environment of Business firms.
3. To know the demand conditions and contemporary economic policies.

Learning Outcomes:
1. Students can learn micro factors of Economic behaviour of a consumer.
2. Students can assess opportunities and threats of business.
3. Students can better understand nature of the products and demand conditions that can be used in decision making.

Unit – I: Introduction to Managerial Economics
Introduction to managerial functions, nature and scope of managerial economics, relation with other subjects, fundamentals concepts of Managerial Economics, Decision Making Process, Decision making under certainty, uncertainty and Risk, Role and Functions of Managerial Economist, Use of Econometric Models.

Unit – II: Theory of Utility
Theory of Utility & Demand utility, Marginal Utility, Law of Marginal Utility, Demand concepts, determinants of demand, Law of Demand, Elasticity of demand, Types of Elasticity, Measurement of Elasticity (Numerics), Demand Estimation for Firm & Industry, Demand Forecasting Methods.

Unit – III: Production & Cost Structure
Production & Cost structure, production function, Determinants of Production, Theories of Production, Benham Theory, Law of Two Variable proportions, Law of Returns to Scale – Cost Concepts, Types of Costs, Short-term and Long-term Cost Curves, Learning Curve, Iso- cost Curve – Equilibrium – BEP Analysis.

Unit – IV: Markets
Markets & Market Behavior, Classification of Markets, Virtual Markets, Perfect Competition Market, Imperfect Competition Markets, Monopolistic Competition Market, Monopoly, Oligopoly, Strategies of Oligopolists, Agriculture Markets & Overview of Market Laws, Overview of Agriculture Market Committees (AMCs), Price Determination under different market structures.

MBA (TECHNOLOGY MANAGEMENT) DAY AND EVENING REVISED SYLLABUS 2022-23

Unit – V: Macro Economics

Macro Economics: National Income concepts and Measurement Income, Employment and Investment, Keynesian Theory & Employment and Investment, Inflation: Types of Inflation, Control Technique of Inflation. Fiscal policies – Budget – Current Budget.

Suggested Books:

1. Dominik Salvatore, "Managerial Economics", Oxford University Press.
2. H. Craig Petersen, W. Cris Lewis, Sudhir K. Jain, "Managerial Economics", Pearson Publication.
3. D.M. Mithani, "Managerial Economics", Himalayan Publishing House.
4. Joel Dean, "Managerial Economics", Tata Mcgraw Hill.
5. R.L. Varshney, K.L. Maheshwari, "Managerial Economics", Sultan Chand Publications.
6. P L Mehatha, "Managerial Economics", S. Chand Publishing.

CHAIRMAN
BOS IN BUSINESS MANAGEMENT
OSMANIA UNIVERSITY,
Hyderabad-500 007, T.S., India.

MBA (TECHNOLOGY MANAGEMENT) DAY AND EVENING REVISED SYLLABUS 2022-23

PAPER CODE – MTM107

Course: ADVANCED EXCEL

UNIT - I: NEW FETUTRES IN ADVANCED –EXCEL:

Characteristics and Basic features of Advanced Excel: Comparision between Excel and Advanced Excel Creating, Naming Saving, Editing and Printing of Worksheets. Data Entry – Manual and Automatic Formatting cells and Cell referencing. Creating and using formulas and Functions Use of Copy, Move and Paste Options. Data and Graphical Options**:** Filling a Series, Sorting data, querying of data. Working with graphs and charts.

UNIT - II CHART RECOMMENDATIONS

Chart types and Chart Recommendations in Advanced Excel Create Charts,Chart Recommendations,Format Charts,Chart Design i.e. Bar Charts / Pie Charts / Line Charts Using SLICERS, Filter data with Slicers Manage Primary and Secondary Axis Change in Charts Group, Chart Recommendations,Fine Tune Charts Quickly Select / De-select Chart Elements Format Style,Format Color,Filter Data being displayed on the Chart

UNIT – III DATA ANALYSIS

Importance of Data Analysis,Various Methods of Data Analysis,Instant Data Analysis, Quick Analysis Features, Quick Analysis of Data Create a PivotTable to analyze external data, Data Model in Excel : Explore Data Using PivotTable,Create Relationship between Tables,Conditional Formatting.

UNIT –IV EXTERNAL DATA CONNECTION & SECURITY FEATURES

Pivot Table Tools, Creation of PivotTable to analyze external data, Connecting new external data source Update Data Connections, Automatically Refresh Data, Automatically refresh data at regular intervals,Enable Background Refresh,Security Features and Managing Passwords in Advanced Excel File-level and Workbook-level: Password Protection in Advanced Excel

CHAIRMAN
BOS IN BUSINESS MANAGEMENT
OSMANIA UNIVERSITY,
Hyderabad-500 007, T.S., India.

MBA (TECHNOLOGY MANAGEMENT) DAY AND EVENING REVISED SYLLABUS 2022-23

UNIT – V

VISUALIZATIONS & ADDITIONAL FEATURES

Basic Data Visualization Principles, Show the Data,Reduce the Clutter,Integrate the Text and the Graph,Create Charts and other Visualizations, Visualization – Matrix, Visualization – Card, Visualization – Charts, Excel – Templates; Modify the internal Data Model, Workbook Relationship, Worksheet Relationship, Cell Relationship, Save a Workbook in another File Format.

SUGGESTED BOOKS:

1. David Whigham, "Business Data Analysis Using Excel", Oxford University Press, Indian

2. Michael Alexander and John Walkenbach "Excel Dashboards and Reports" Edition.

3. Paul Cornell, "Accessing & Analyzing DATA with MS-EXCEL".

4. Microsoft Excel 365 Bible: The Comprehensive Tutorial Resource

5. R & D, "IT Tools and Applications", Macmillan India Ltd.

6. Sanjay Saxena, "A First Course in Computers – Based on Windows Office XP", Second Edition

– Vikas Publishing House.

MBA (TECHNOLOGY MANAGEMENT) DAY AND EVENING REVISED SYLLABUS 2022-23

II - SEMESTER

MBA (TECHNOLOGY MANAGEMENT) DAY AND EVENING REVISED SYLLABUS 2022-23

PAPER CODE: MTM 201

COURSE: TECHNOLOGY FORECASTING & TRANSFER MANAGEMENT

Course Objectives:

1. The course aims at developing an understanding of technology forecasting as a process and techniques and methodologies used in this context.
2. Aims at providing inputs on technology assessment and also capability assessment of business units in the context of technology search and acquisition
3. To enable the students to understand the various models of Technology transfer, assessment, assimilation and finally the implementation of new technologies.

Learning Outcomes:
1. To apply quantitative and qualitative methods of Technology forecasting
2. To apply the process of technology transfer
3. To apply methods of appraisal of projects to assess their feasibility

UNIT I - FORECASTING METHODS
Forecasting as an input to Technology Management, elements of forecasting process, types of forecasting methods, Uncertainties in the context of forecasting process, coping with Uncertainties associated with evolving and ever changing technologies, Quantitative methods of Forecasting: Multiple Regression method, Economic Models, Time Series Models, Linear Trend Projection, Precursor, Envelop curves, Experience curves, Technical Assessment Relevance of Quantitative Methods in Technology Forecasting - Limitations and Safeguards.

UNIT II - QUALITATIVE METHODS OF FORECASTING:
Morphological analysis, Relevance trees, Delphi method, Technological Gap analysis, Analogy Method, organizing for Technology Forecasting, Suitability of Qualitative Methods, in Technology Forecasting - Evaluation Process - Scope and Limitations - Complementarity of Quantitative and Qualitative Methods of Technology Forecasting, Box Jenkins method Forecasting Business conditions, Leading indicator method, Econometric method, Forecast Evaluation and Revision, cases and practical problems in the context of technological forecasting.

UNIT III – TECHNOLOGY TRANSFER
Definitions, classifications, channels of technology flow, Internal technology transfer, External technology transfer, International technology transfer,
Transfer Modes, Technology search strategy, Dimensions of Technology Transfer, Features & Routes of Technology Transfer, Technology Transfer agreements, Technology Transfer and absorption at unit level. Procedural and legal issues in the context of drafting technology transfer agreements.

CHAIRMAN
BOS IN BUSINESS MANAGEMENT
OSMANIA UNIVERSITY,
Hyderabad-500 007, T.S., India.

MBA (TECHNOLOGY MANAGEMENT) DAY AND EVENING REVISED SYLLABUS 2022-23

UNIT IV – TECHNOLOGY ASSESSMENT

Technology assessment, Assessment of Innovation, Technological metrics, Technological audits, Reengineering the technology delivery process, Technology transfer for small companies, Technology Transfer by strategic partnering.

Technology absorption and diffusion, concepts, constraints of Technology absorption, Technology import in India. Technology Assessment, Technology evaluation, Diffusion of Technology. Technology Absorption and indigenization process.

UNIT V - TECHNOLOGY APPRAISAL

a) Concept of Project: Characteristics and importance of Technology Projects - Technology Project development cycle - Types of projects - Risk-return trade off.
b) Identification of investment opportunities: Sources of new project ideas - Preliminary screening of projects.
c) Feasibility Studies and Reports: Broad aspects of appraisal - Market feasibility, Technical feasibility, Operational feasibility, Financial feasibility.

Suggested Readings:

1.Martino J p: Technological Forecasting for Decision-Making, North Holland, New York.

2.Porter Al et al: A Guidebook for Technology Assessment and Analysis, North Holland

3.CharlesW. Gross and Robin J. Peterson: Business Forecasting, Houghton Mifflin Co.

4.Jarret J: Business Forecasting methods, Basil Blackwell Ltd, Oxford

5. Box and Jenkins: Time Series Analysis, Forecasting and control, Holden Day.

6. Warren Gilchrist, Stastical Forecasting, John Wiley

7. Tarek Khalil: Management of Technology, McGraw Hill

8. Cardullo M W: Introduction to Managing Technology, Wiley, New York

9. Manual on Technology Transfer, UNIDO

10. Sakonyi R: Technology Management, Averbach, Boca Raton

11. Project Appraisal: A Third World View Point: UNID Publications

12. Project Evaluation and Management: M.K.Singh.

13. Projects, Preparation, Appraisal and Implementation: Prasanna Chandra, TMH, New Delhi.

14. Project Financing: H.P.S. Pahwa.

15. Clifford. F. Gray, Erik. W. Larson: Project Management, the Managerial Emphasis, McGraw Hill

CHAIRMAN
BOS IN BUSINESS MANAGEMENT
OSMANIA UNIVERSITY,
Hyderabad-500 007, T.S., India.

MBA (TECHNOLOGY MANAGEMENT) DAY AND EVENING REVISED SYLLABUS 2022-23

PAPER CODE: MB 202

Course: HUMAN RESOURCE MANAGEMENT

Course Objectives

1. The Objective of the course is to develop an understanding Human Resources
2. To learn various approaches andpractices of Human Resource Management.
3. To provide Skills and abilities to identify potential employees and evaluate competences.

Learning Outcomes:
1. Transform Human beings into Human Resources
2. Build Global Level HR Managers
3. Create Agile Workforce for attaining Innovation in business organizations.

Unit - I: HRM Evolution.

Functions of HRM. Typology, system & matrix of HR. HRM models. Aligning HR strategy with Corporate strategy, HRIS, e-HRM, HRMS, Strategic HR metrics & Interactive HR Dashboards. Humane Values & Competency Framework for innovative HR. Measure of Human Assets Potential. Human Capability Management. Survival Capacity Building for Pandemics & Disruptive Technologies.

Unit - II: HR Planning & Design.

Traditional, Functional & Strategic Job analysis, Position analysis questionnaire, Work Connectivity Index, Threshold traits analysis. Job Design & Redesign. Job evaluation: Competency Modelling, Cognitive task analysis. Performance Appraisal, HR Planning: Strategic Designing of Hybrid, Blended, Virtual & Gig workforces. Recruitment: Virtual Vs Real. Selection Process: Psychometrics in Aptitude & Psychological testing.

Unit - III: HR Training & Development

Training needs analysis. Off-the-job training: Vestibule, Simulation, Case study, Design thinking, Behaviour Modelling, Business Games, Adventure and Action Learning. On-the-job training: Job instruction, Job rotation, Apprenticeship, Demonstration, Psychodrama & Role Play. HRD. HR Accounting: Lev and Schwartz, Flamholtz and Hermanson's Models. HR Audit: Philips RoI model. Career planning model. Employee Development & Transition.MDP.

MBA (TECHNOLOGY MANAGEMENT) DAY AND EVENING REVISED SYLLABUS 2022-23

Unit - IV: Effective HR Systems.

Code of Conduct, Discipline & Ethics, Group dynamics, Learning Organization, QWL, Standing Orders, Strategic Rewards & Compensation Management, Employer Branding, Employee Value Proposition. Grievance redressal, Stress Management, Psychological Contract: Employee Engagement, Involvement & Loyalty. Peak Performance modelling for Human Capability, Human Copability & Human Competency.

Unit - V: Emerging HR Trends.

Workforce Diversity, Inclusivity & Equity. HR analytics, Empowering skills by Emotional Intelligence, Work life conflicts & integration. International HRM, Global HRM, Sustainable HRM, Strategic HRM & Agile HRM. HR Score card. Intelligent tutoring systems. Organizational Change, Design, Effectiveness & Development. Professional & Psychological Counseling for Pandemics, Jobloss, Mergers & Acquisitions.

Suggested Books:

1. David Lepak, Mary Gower, Human Resource Management, Pearson.
2. Paul Banfield, Rebecca Kay, Human Resource Management, Oxford.
3. Decenzo, Human Resource Management, Wiley.
4. Wayne &Caseia, Ranjeet Nambudri, "Managing Human Resource, TMH.
5. Gomez Mejia et.al, Managing Human Resource, PHI.

CHAIRMAN
BOS IN BUSINESS MANAGEMENT
OSMANIA UNIVERSITY,
Hyderabad-500 007, T.S., India.

MBA (TECHNOLOGY MANAGEMENT) DAY AND EVENING REVISED SYLLABUS 2022-23

PAPER CODE – MTM 203
Course: BUSINESS INTELLIGENCE

Course Objectives:
To provide an understanding of concepts of Business Intelligence and relate topics such as Data Warehousing, Data Mining, Business Performance Management, Business Analytics and Data Visualization.

Course Outcomes:
1. Emphasizes the Practical need for good decision support system as Bi in an Organization.
2. Helps in connecting statics for implementing Data ware houses, Business performance Measurements tools and helps in realizing the potential of Business Analysis in decision support.

Unit – I: Introduction to Business Intelligence (BI):
Definition, History and Evolution, Styles of Business Intelligence, Benefits if Business Intelligence, Real-time Business Intelligence, Business Intelligence Value Chain, Architecture of Business Intelligence.

Unit – II: Data Warehousing and Data Mining:
a) Date Ware housing (DWH): - Definition, Characteristic, types, Date ware housing frame work, Data Warehousing architecture, Alternative Architectures, Data ware housing Integration, Data ware housing- Development Approaches, Real time Data ware housing.
b) Data Mining: - Definition, Characteristic, Benefits, Date Mining Functions, Data Mining Applications, Data Mining techniques and tools. Text Mining, Web Mining.

Unit – III: Business Performance Measurement (BPM):
Definition, BPM v/s BI, BPM Processes-Strategize, Plan, Monitor, Act/Adjust, Performance Measurement, BPM Methodologies, BPM Architecture and Applications.

Unit – IV: Business Analytics
Business Analytics - Definitions, Tools and techniques of BA, Basics of Descriptive, Predictive and Prescriptive Analytics, Visual Analytics, Social Analytics, Text and Web Analytics, Sentiment Analysis, Benefits and Success of Business Analytics, Big Data-definition, Three V's (Volume, Variety, Velocity) of Big Data.

Unit – V: Data Visualization
Data Visualization- Definition, History of Visualization, types of data – categorical, ordinal and quantitative data, Data Visualization tools – Multidimensional Data Visualization Tools (Column and Bar Graphs, Charts, Line Graphs, Scatter Plots, Pie graph) Hierarchical and Landscape Data Visualization Tools (Maps, Tree Graph) -Performance Dash boards and Score Cards.

MBA (TECHNOLOGY MANAGEMENT) DAY AND EVENING REVISED SYLLABUS 2022-23

Suggested Books:

1. Business Intelligence – A Managerial Approach – by Turban, Sharada, Delen, King - Pearson – Second Edition – 2014.
2. Decision Support and Business Intelligence Systems – Turban, Aaronson, Liang, Sharada- Pearson, latest Edition.
3. Successful Business Intelligence, Cindi Howson, McGraw Hill Education – Indian Edition.

MBA (TECHNOLOGY MANAGEMENT) DAY AND EVENING REVISED SYLLABUS 2022-23

PAPER CODE – MTM 203
Course: BUSINESS INTELLIGENCE

Data Visualization (Practical Syllabus)

1. Getting started with Tableau Software Using Data file formats Connecting your Data to Tableau Creating basic charts (line, bar charts, Treemaps)
2. Tableau Calculations Overview of SUM, AVR, and Aggregate features Creating custom calculations and fields Applying new data calculations to your visualization Formatting Visualizations Formatting Tools and Menus Formatting specific parts of the view Editing and Formatting Axes
3. Manipulating Data in Tableau Cleaning-up the data with the Data Interpreter Structuring your data Sorting and filtering Tableau data
4. Tableau data Advanced Visualization Tools Using Filters Using the Detail panel Using the Size panels Customizing filters Using and Customizing tooltips Formatting your data with colors
5. Creating Dashboards, Adding interactivity to Dashboard.
6. Distributing & Publishing Your Visualization Tableau file types Publishing to Tableau Online Sharing your visualization Printing and exporting.

Suggested Books

1. Visual Data Story Telling with Tableau by Lindy Ryan, Pearson Publications.
2. Jumpstart Tableau: A Step- by Step Guide to Better Visualization by Khan, Apress.
3. Tableau For Dummies by Molly Monsey and Paul Sochan.

MBA (TECHNOLOGY MANAGEMENT) DAY AND EVENING REVISED SYLLABUS 2022-23

Paper Code – MTM 204

Course: BUSINESS RESEARCH METHODS

Course Objectives:

1. Enable students to learn the importance of Research
2. To involve students in activities related to Research
3. To train them on Data collection and data processing methods
4. To impart Report writing skills to Management graduates
5. To help learners gain overall insights into the finer aspects of research Methodology

Course Outcomes:

1. To gain understanding of various kinds of research design
2. To enable learners to be able to formulate the research problem
3. To acquire basic knowledge on qualitative and quantitative research
4. To have knowledge on descriptive and inferential data tools
5. To be able to write and develop independent and critical analysis for report writing

Unit – I: INTRODUCTION TO RESEARCH

Business Research: Definition, Significance, Nature & Importance – Criteria of Business Research – Marketing Information System, paradigm shift in Research – Research Design Types of Research Designs – Descriptive, Exploratory, Diagnostic, and Causal Research – Types of research, Theoretical and Empirical Research – Cross-sectional and Time-series Research — Research Objectives – Research Hypotheses – Characteristics - Research from an Evolutionary Perspective – the Role of Literature Review in Research

Unit – II: RESEARCH PROCESS & DATA COLLECTION

Research Process – Data Sources- Primary Data – Secondary Data - Data Collection Methods – Types of Data Collection - Questionnaire Design – Questionnaire Layout – Question Content - Wording – Target Population Identification – Sampling Process – Sampling Design – Sampling techniques – Sampling Procedure – Sampling Types – Pilot Study – Pre- Test.

Unit – III: SCALING AND MEASUREMENT

Measurement and Scaling Techniques – Different types of Scales – Nominal, Ordinal, Interval and Ratio Scales – Purpose and Benefits of Scaling – Construction of Instrument Attitudinal Scales – Number of Dimensions in Scaling - Construction and Application - Data Analysis - Editing – Tabulation – Cross Tabulation – Data Content Validity, Construct Validity and Reliability

MBA (TECHNOLOGY MANAGEMENT) DAY AND EVENING REVISED SYLLABUS 2022-23

Unit – IV: DATA ANALYSIS AND STATISTICAL TECHNIQUES

Test of Hypothesis – Type-I, Type - II Errors - Small Samples and Large Samples – Parametric and Non-Parametric Tests – Chi Square Test – Mc Nemar Test – ANOVA – One Way and Two Way Analysis - Bivariate and Multivariate Statistical Techniques – Factor Analysis – Discriminant Analysis – Cluster Analysis – Correlation and Multiple Regression Analysis – Multidimensional Scaling.

Unit – V: REPORT DESIGN, WRITING, AND ETHICS IN BUSINESS RESEARCH

Report Preparation - Different Types of Reports – Contents of Report – Need for Executive Summary – Chapterization – Contents of Chapter – Report Writing – The Role of Audience
– Readability – Comprehension – Tone – Final Proof – Report Format – Title of the Report – Ethics in Research – Ethical Behaviour of Research – Plagiarism – Essentials of Referencing - Subjectivity and Objectivity in Research.

Suggested Books:

1. Donald R. Cooper, Pamela S. Schindler and J K Sharma, Business Research Methods, Tata Mc Graw Hill, New Delhi.
2. Alan Bryman and Emma Bell, Business Research Methods, Oxford University Press, New Delhi.
3. Uma Sekaran and Roger Bougie, Research Methods for Business, Wiley India, New Delhi.
4. William G Zikmund, Barry J Babin, Jon C.Carr, Atanu Adhikari ,Mitch Griffin, Business Research methods, A South Asian Perspective, Cengage Learning, New Delhi.
5. Bordens, K. S. and Abbott, B. B., Research Design and Methods - A Process Approach, New York, McGraw-Hill.
6. Creswell, J. W., Qualitative Inquiry & Research Design: Choosing Among Five Approaches, California, Sage Publications, Inc.
7. Charmaz, K., Constructing Grounded Theory: A Practical Guide through Qualitative Analysis, London, SAGE Publications Ltd.

CHAIRMAN
BOS IN BUSINESS MANAGEMENT
OSMANIA UNIVERSITY,
Hyderabad-500 007, T.S., India.

MBA (TECHNOLOGY MANAGEMENT) DAY AND EVENING REVISED SYLLABUS 2022-23

PAPER CODE – MTM 205
Course: FINANCIAL MANAGEMENT

Course Objectives:
1. To learn about the scope and goal of financial management.
2. To familiarize the student with the concepts of long term and short term investment decisions.
3. To understand the dividend decisions of firms.

Learning Outcomes:
1. To understand project appraisal methods to build healthy cash flows.
2. To understand the corporate practices inventory and dividend policies.
3. To learn about corporate events like mergers, acquisitions and alliances.

Unit – I: The Finance function:

Nature and Scope; Evolution of finance function – Its new role in the contemporary scenario –Goals of finance function – maximizing vs. satisfying; Profit vs. Wealth vs. Welfare; the Agency relationship and costs; Risk-Return trade off; Concept of Time Value of Money – Future Value and Present value.

Unit – II: The Investment Decision:

Investment decision process- Project generation, project evaluation, project selection and project implementation. Developing Cash Flow; Data for New Projects; Using Evaluation Techniques – Traditional and DCF methods. The NPV vs. IRR Debate; Approaches for reconciliation. Capital budgeting decision under conditions of risk and uncertainty; Measurement of Risk – Risk adjusted Discount Rate, Certainty Equivalents and Beta Coefficient, Probability tree approach, Sensitivity analysis.

Unit – III: The Financing Decision:

Sources of finance – a brief survey of financial instruments; Capital Structure Theories, Concept and financial effects of leverage; The capital structure decision in practice: EBIT – EPS analysis. Cost of Capital: The concept – Average vs. Marginal Cost of Capital; Measurement of Cost of Capital – Component Costs and Weighted Average Cost of Capital

Unit – IV: Current Assets Management and Dividend Decision:

Concept of current assets, characteristics of working capital. Factors determining working capital. Estimating working capital requirements. Working capital policy. Management of current assets: Cash Management, Receivables Management and Inventory Management. Bank norms for working capital financing. The Dividend Decision: Major forms of dividends

– Cash and Bonus shares. The theoretical backdrop – Dividends and valuation; Major theories centered on the works of Gordon, Walter, and Lintner. A brief discussion on dividend policies of Indian companies.

CHAIRMAN
BOS IN BUSINESS MANAGEMENT
OSMANIA UNIVERSITY,
Hyderabad-500 007, T.S., India.

MBA (TECHNOLOGY MANAGEMENT) DAY AND EVENING REVISED SYLLABUS 2022-23

Unit – V: Corporate Restructuring and Corporate Governance:

Corporate Mergers, acquisitions and takeovers: Types of mergers, Economic rationale of Mergers, motives for mergers; financial evaluation of mergers; Approaches for valuation:DCF approach and Comparable Company approach (No practical exercises). CorporateValue based management systems. Approaches: Marakon approach and McKinsey approach;Principles of good corporate Governance.

Suggested Books:

1. Jonathan Berk, Peter DeMarzo, Ashok Thampy, "Financial Management", Pearson.
2. Brigham, E. F. and Ehrhardt. M. C., "Financial Management Theory and Practice", Thomson South-Western.
3. Ross Westerfield Jaffe, "Corporate Finance", TMH Publishers
4. Vishwanath S. R., "Corporate Finance: Theory and Practice", Sage Publications.
5. Prasanna Chandra,"Financial Management Theory and Practice", Tata McGraw Hill,
6. I. M. Pandey, "Financial Management", Vikas Publishing House.
7. Sudershana Reddy, "Financial Management", HPH.
8. Rajiv Srivastava and Anil Misra, "Financial Management", Oxford Higher Education.

MBA (TECHNOLOGY MANAGEMENT) DAY AND EVENING REVISED SYLLABUS 2022-23
PAPER CODE – MTM 206
Course: OPERATIONS RESEARCH

Course Objectives:

The objective of the course is to give an overview of differentOptimization Techniques useful for problem solving and decision making.

1. To introduce OR techniques like LPP for business planning.
2. To Study network Concepts and techniques like PERT and CPM.
3. To study quantitative competitive strategy models such as game theory, simulation andqueuing theory for understanding markets..

Learning Outcomes:

1. Helps in formulating real life situations in organizations in Quantitative form.
2. Helps in formulating strategies for optimal use of various resources within theorganizations..
3. Application of optimization tools for decision-making.

Unit – I: Introduction

i. Introduction to OR- Origin, Nature, definitions, Managerial applications and limitationsof OR.
ii. Linear and Non- Linear, Integer, Goal [Multi-Objective] and Dynamic ProgrammingProblems (Emphasis is on Conceptual frame work-no numerical problems.
iii. Linear Programming: Mathematical model, Formulation of LPP, assumptionsunderlying LPP, Solution by the Graph, Exceptional cases.

Unit – II: Allocation Model - I

i. LPP - Simplex Method- Solution to LPP problems Maximisation and Minimisationcases Optimality conditions. Degeneracy.
ii. Dual - Formulation, Relationship between Primal - Dual, Solution of dual, Economicinterpretation of dual.
iii. Sensitivity analysis and its implications.

Unit – III: Allocation Model - II

i. Transportation Problem (TP) - Mathematical model, IBFS using northwest corner rule, Row and Column Minimum methods, Matrix minimum method(LCM) and Vogel's approximation method, Unbalanced TP, Degeneracy, Optimality Test and Managerial applications.
ii. Assignment Problem (AP): Mathematical model, Unbalanced AP, Restricted AP, method of obtaining solution- Hungarian method.
iii. Travelling salesman problem, Managerial applications of AP and TSP.
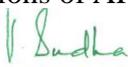
MBA (TECHNOLOGY MANAGEMENT) DAY AND EVENING REVISED SYLLABUS 2022-23

Unit – IV: Network Models

i. Network fundamentals- scheduling the activities -Fulkerson's Rule –CPM- earliest and latest times -determination of ES and EF in the Forward Pass - LS and LF in backward pass determination of Critical Path, Crashing, time cost trade off.

ii. PERT-Beta Distribution, probabilistic models, Calculation of CP, resource analysis and allocation.

Unit – V: Waiting Line / Competitive Strategy Models

i. Queuing Theory - Concepts of Queue/Waiting Line - General structure of a Queuing system- Operating characteristics of Queues, deterministic Queuing models - Probabilistic Queuing Model –Cost Analysis - Single Channel Queuing model - Poisson arrival and exponential service times with infinite population.

ii. Game Theory- concepts, saddle point, Dominance, Zero-sum game, two, three and more Persons games, analytical method of solving two person zero sum games, graphical solutions for (m x 2) and (2 x n) games.

iii. Simulation- Process of simulation, Applications of simulation to different management Problems.

Suggested Books:

1. N.D. Vohra, "Quantitative Techniques in Management",TMH.
2. J.K. Sharma, "Operations Research Theory and Applications,Macmillan.
3. Kasana, HS & Kumar, KD, "Introductory Operations Research theory and applications",Springer.
4. Chakravarty, P, "Quantitative Methods for Management and Economics", HPH.
5. Barry Render, Ralph M. Stair, Jr. and Michael E. Hanna, "Quantitative analysis for Management",Pearson.
6. Pannerselvam, R, "Operations Research", PHI.
7. Selvaraj, R, "Management Science Decision Modeling Approach", Excel.
8. Ravindran, A, Don T. Phillips and James J. Solberg, "Operations Research Principles and Practice", John Wiley and Sons.
9. Hillier, Frederick S. & Lieberman, "Introduction to Operations Research Concepts and Cases", TMH.
10. Prem Kumar Gupta & others, "Operations Research", S. Chand.